Travelling Buffer/Grinder System

by Allen Neighbors

I set up my little Vicmarc for buffing/grinding when I travel, so I don't have to carry two more heavy motors along. I used a piece of oak cutoff to make an arbor that would be held by my SN2 Chuck. I drilled a ½" thru-hole using my tailstock drill chuck, then used a spade bit to make a larger hole on the backside, to recess a ½" bolt head, and glued the bolt in the arbor. I carefully turned down the face of the oak. That way the arbor would be the right length for my buffing wheels, the backing washer, the front washers, and the nut (I superglued a leather washer to the front washer to make the nut come off by hand). Since this arbor will double as a grinding arbor, I used my 1⁄16" parting tool and parted off a 3⁄8" thick *washer* from the front of the oak…this will be removed when the grinding wheel is installed, to allow for the greater thickness of the wheel with its own washers.

This first pic shows the arbor, with the wooden washer, the buffer backing washer, the front washer, and the nut. I marked the No. 1 Jaw so I will install it the same every time.

This shows the white diamond wheel mounted and spinning. The flash stopped most of the action. It's smooth as silk!

This shows the grinding wheel mounted. You can see where I marked the arbor, the washer, and the wheel label, so I can index it exactly every time for balance. It

works. You can also see the wooden *washer*, removed, laying on the little lathe table, to the right of the wheel.

This shows the piece of white plexiglass resting in position to measure the distance the arm is adjusted from the wheel. The arm is mounted on the same board the lathe is mounted to. This proves that the distance the arm is vertically from the wheel is not that important. I simply put the gouge in the Varigrind, stuck it in the V-arm support, and slid the arm in until the tip of the gouge was flat against the wheel. Perfect grind, every time.

I made a little wooden tool rest using a ¾" dowel (to fit in the tool rest base) and a flat piece of plywood. You raise it until the tip is flat against the wheel…no tilting necessary.

This just shows the backside of the Vicmarc with the necessary tools mounted so they are handy, and I don't have to look in a box for them when needed.

I hope all these thoughts will help someone get things together for travelling.